

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP01/06716

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl.⁷ H01M4/90, H01M4/88

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ H01M4/86-4/96

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926-1996	Toroku Jitsuyo Shinan Koho	1994-2001
Kokai Jitsuyo Shinan Koho	1971-2001	Jitsuyo Shinan Toroku Koho	1996-2001

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
10/17/01 X A	US 5766788 A (Tanaka Kikinzoku Kogyo K.K.), 16 June, 1998 (16.06.98), Claims; column 2, line 9 to column 4, line 46 & JP 8-227716 A Claims; page 2, right column, line 33 to page 3, right column, line 23	1-3, 5 4, 6-14
10/17/01 X A	JP 8-162123 A (Tanaka Kikinzoku Kogyo K.K.), 21 June, 1996 (21.06.96), Claims; page 2, right column, line 49 to page 3, right column, line 23 (Family: none)	1-3, 5 4, 6-14
10/17/01 X A	JP 10-189004 A (Tokyo Gas K.K.), 21 July, 1998 (21.07.98), Claims; page 5, right column, line 49 to page 6, left column, line 44 (Family: none)	1-3, 5 4, 6-14

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:
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"&" document member of the same patent family

Date of the actual completion of the international search
30 October, 2001 (30.10.01)Date of mailing of the international search report
13 November, 2001 (13.11.01)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 945910 A2 (Degussa-Huls Aktiengesellschaft), 29 September, 1999 (29.09.99), Claims & JP 11-329452 A Claims	1-14
A	JP 2-162650 A (Mitsubishi Electric Corporation), 22 June, 1990 (22.06.90), Claims (Family: none)	6-14
A	US 5723173 A (Matsushita Electric Industrial Co., Ltd.), 03 March, 1998 (03.03.98), Claims & JP 8-264190 A Claims	6-14
E, X E, A	JP 2001-250564 A (Mitsubishi Heavy Industries, Ltd.), 14 September, 2001 (14.09.01), Claims; page 2, right column, line 49 to page 4, right column, line 24 (Family: none)	1-3, 5 4, 6-14